

Title (en)

Method and apparatus for the optical determination of a surface profile of an object

Title (de)

Verfahren und Vorrichtung zur optischen Vermessung eines Oberflächenprofils eines Objektes

Title (fr)

Procédé et appareil pour la mesure optique d'un profil de surface d'un objet

Publication

**EP 1199542 A3 20030115 (DE)**

Application

**EP 01124014 A 20011009**

Priority

- DE 10050963 A 20001013
- DE 10149357 A 20011006

Abstract (en)

[origin: US2002071125A1] The object of the invention is a method and an apparatus for optical measurement of a surface profile of a specimen, a series of n images of the specimen being acquired with an image acquisition apparatus in different planes in the z direction of a coordinate system (x, y, z). The image contents of all n images of the resulting image stack are compared to each other in the z direction at each coordinate point (x, y) in order to determine a plane therefrom according to predetermined criteria, assign its plane number (N) to that coordinate point (x, y), and store it in a mask image. The mask image contains all the 3D data of the specimen surface. Processing can be performed using 2D image processing procedures. The 3D information can be quickly and easily retrieved from the mask image. The surface profile can be reconstructed and displayed three-dimensionally.

IPC 1-7

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**G01B 11/24** (2006.01)

CPC (source: EP US)

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Citation (search report)

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